

NRA porosity - C_xEO₁₀ series

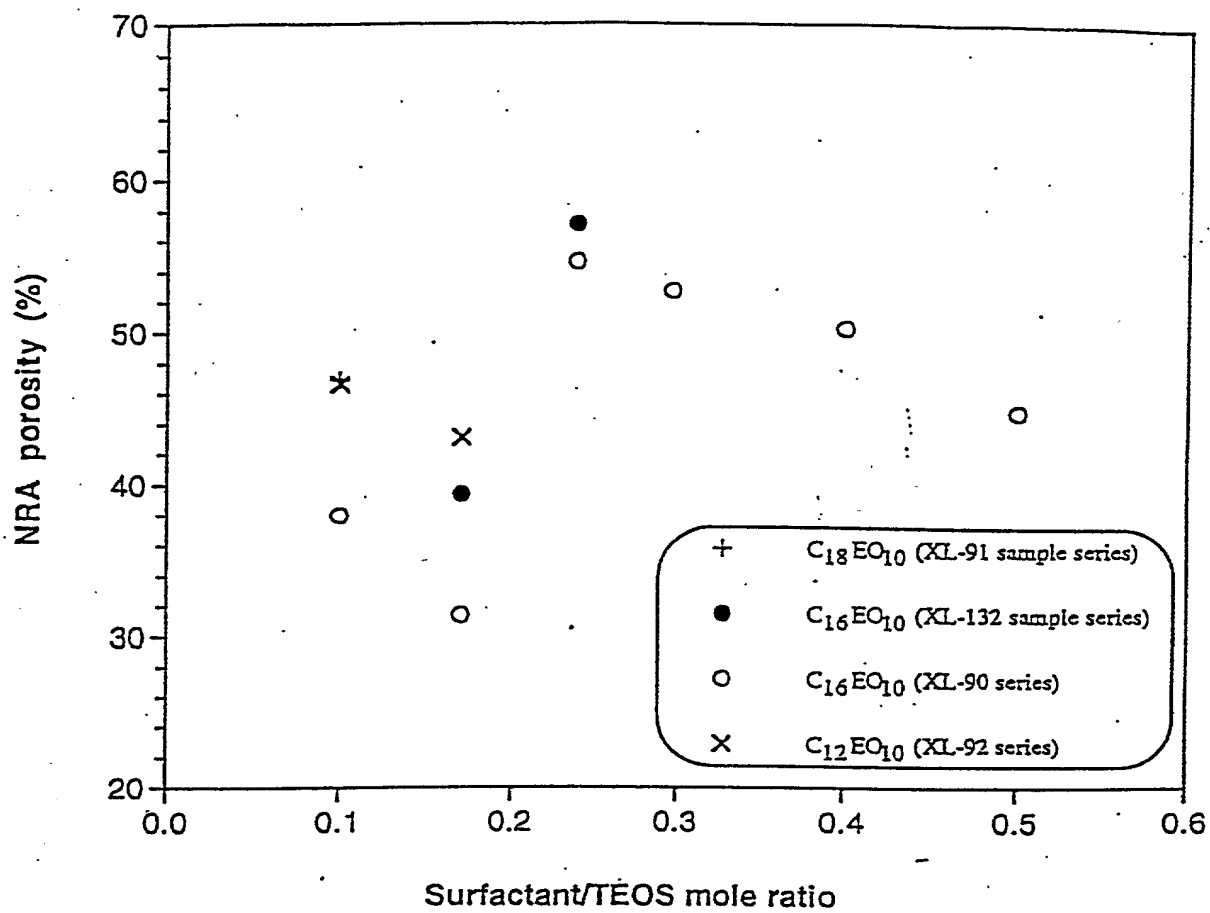


FIG. 1

$C_{12}EO_{10}$ based Films
Surfactant/TEOS mole ratio = 0.17

Effect of Dehydroxylation Treatments on k'

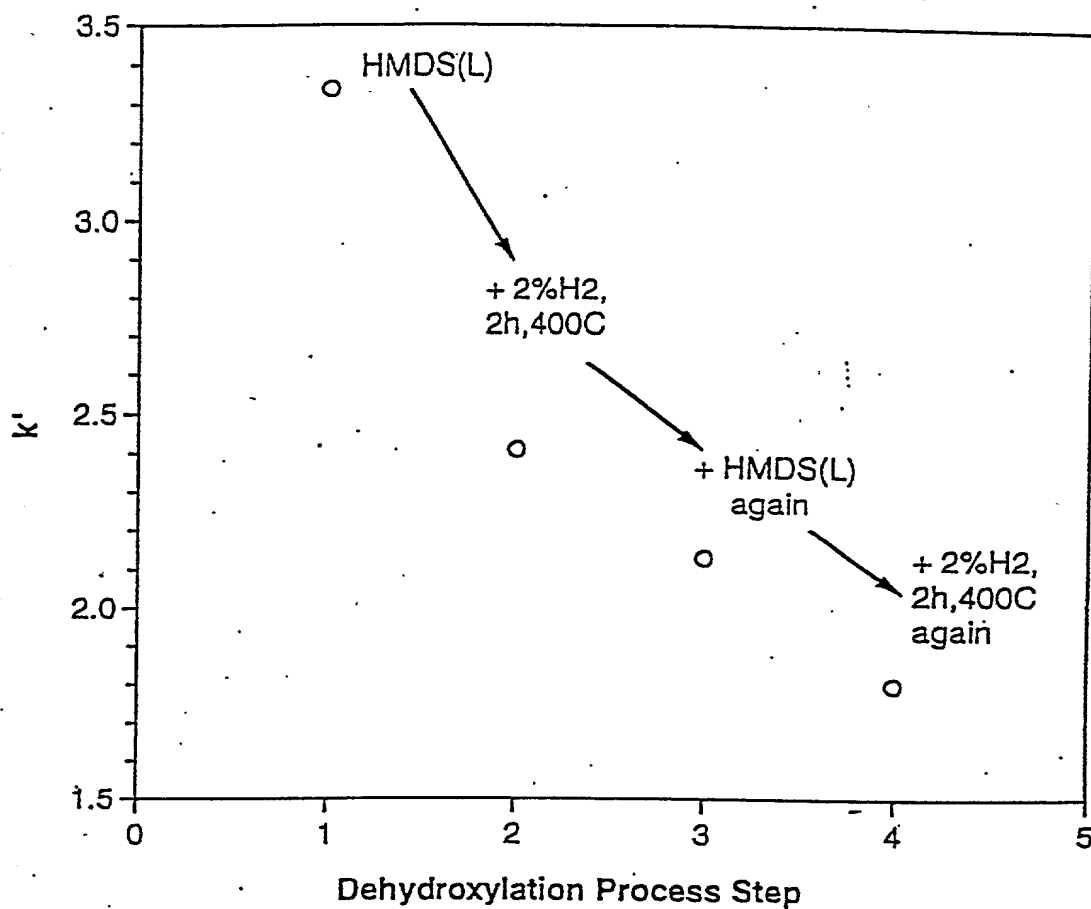


FIG. 2

$C_{16}EO_{10}$ based Films
Surfactant/TEOS mole ratio = 0.3

Effect of Dehydroxylation Treatments on k'

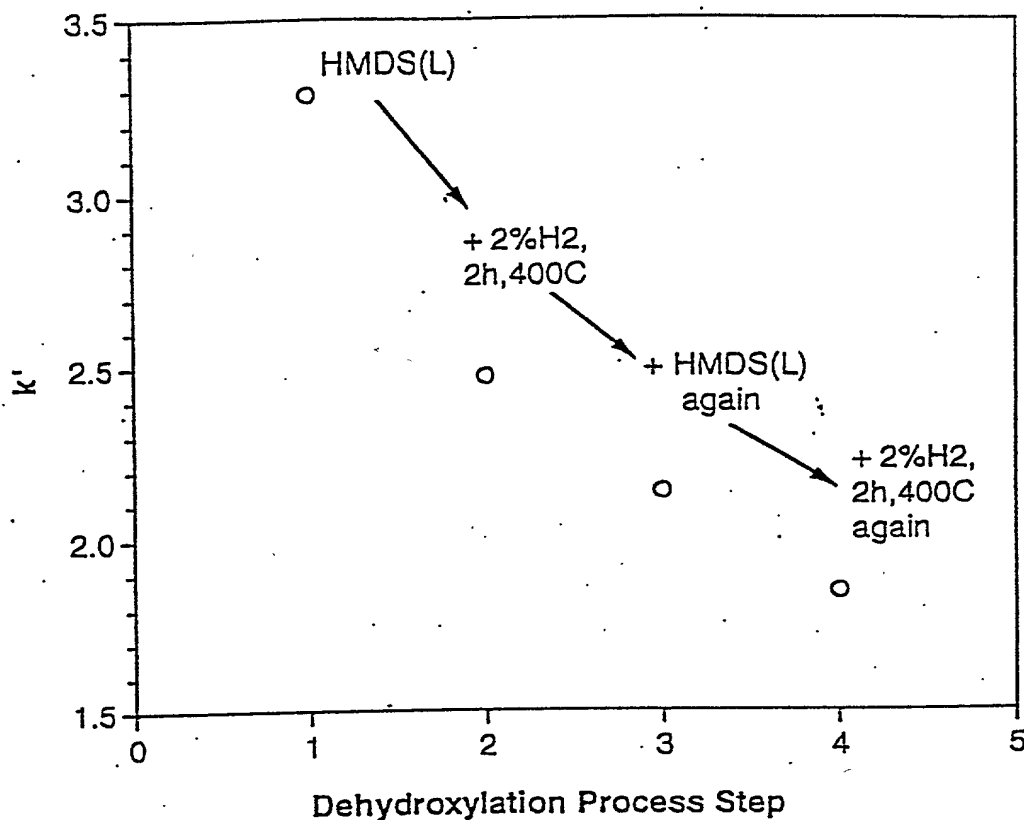


FIG. 3

<C90506D.RD> 144-2

TOP-5834300

Center Spot - Beam ALONG Radius

Intensity(CPS)

2-Theta(deg)

Fig. 4a

600

500

400

300

200

100

0

1.0

2.0

3.0

4.0

5.0

6.0

7.0

8.0

9.0

TD340-5334360

<C90506B.RD> 144-2

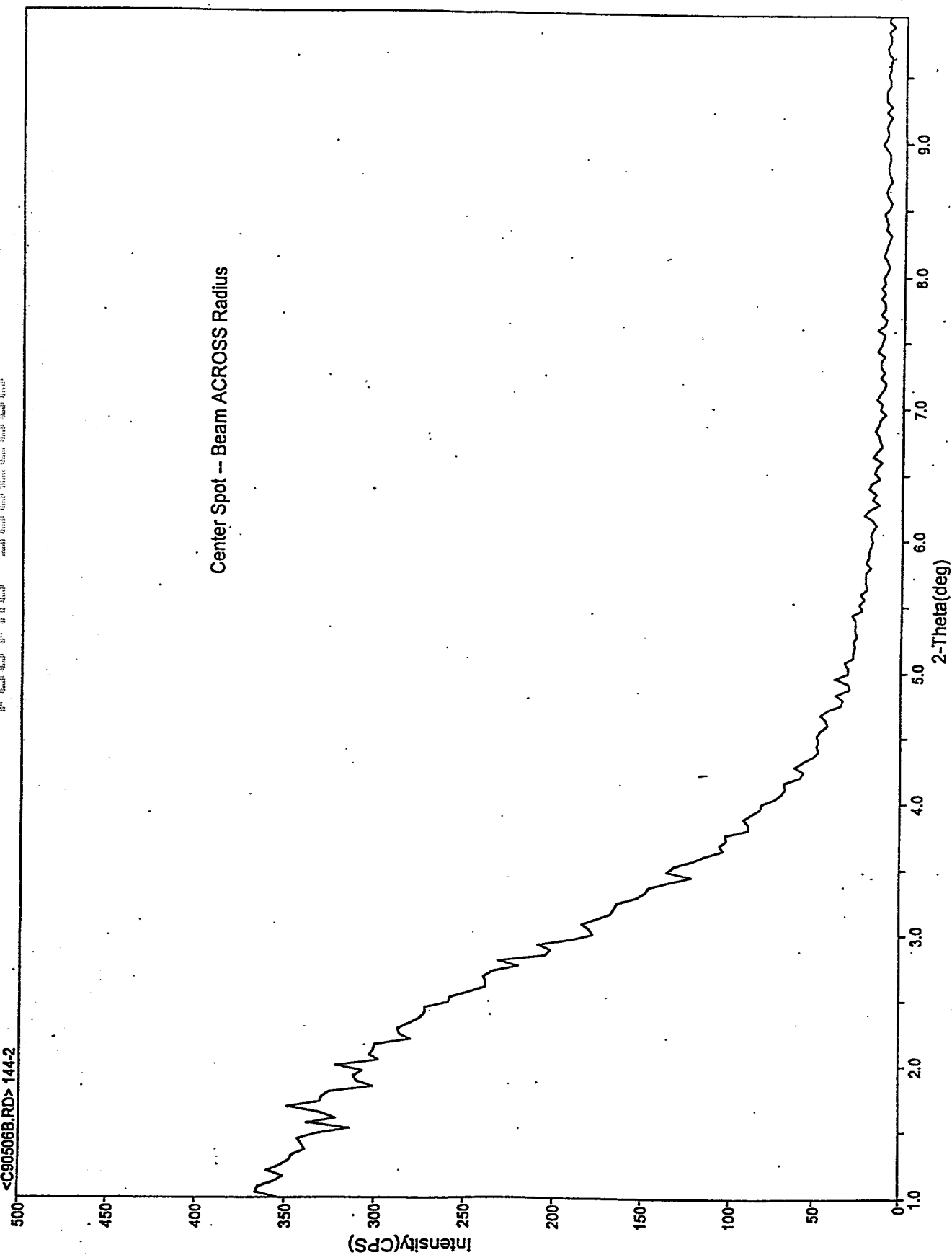


FIG. 4b

TOPTO 5884E60

TEM micrograph showing ultrafine pores and a disordered pore structure in surfactant-templated mesoporous silica film

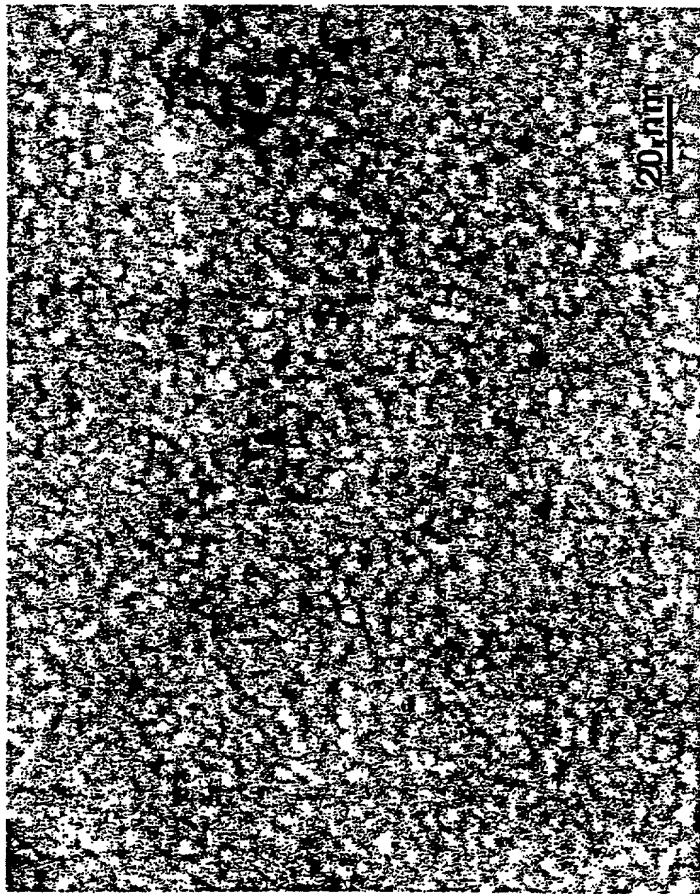


Fig. 5

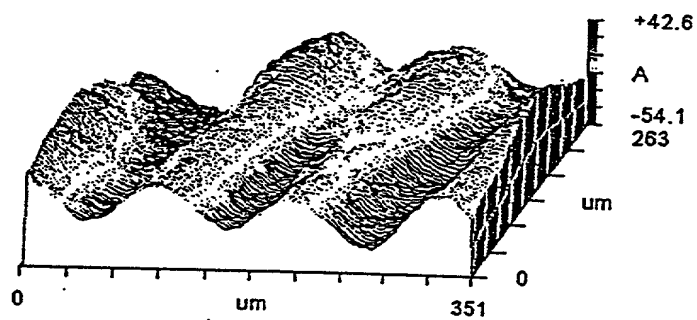


FIG. 6a

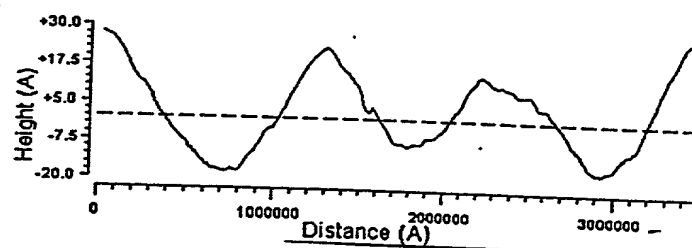


FIG. 6b

Modulus between 14 and 17 GPa
obtained for 50-300 microNewton loads

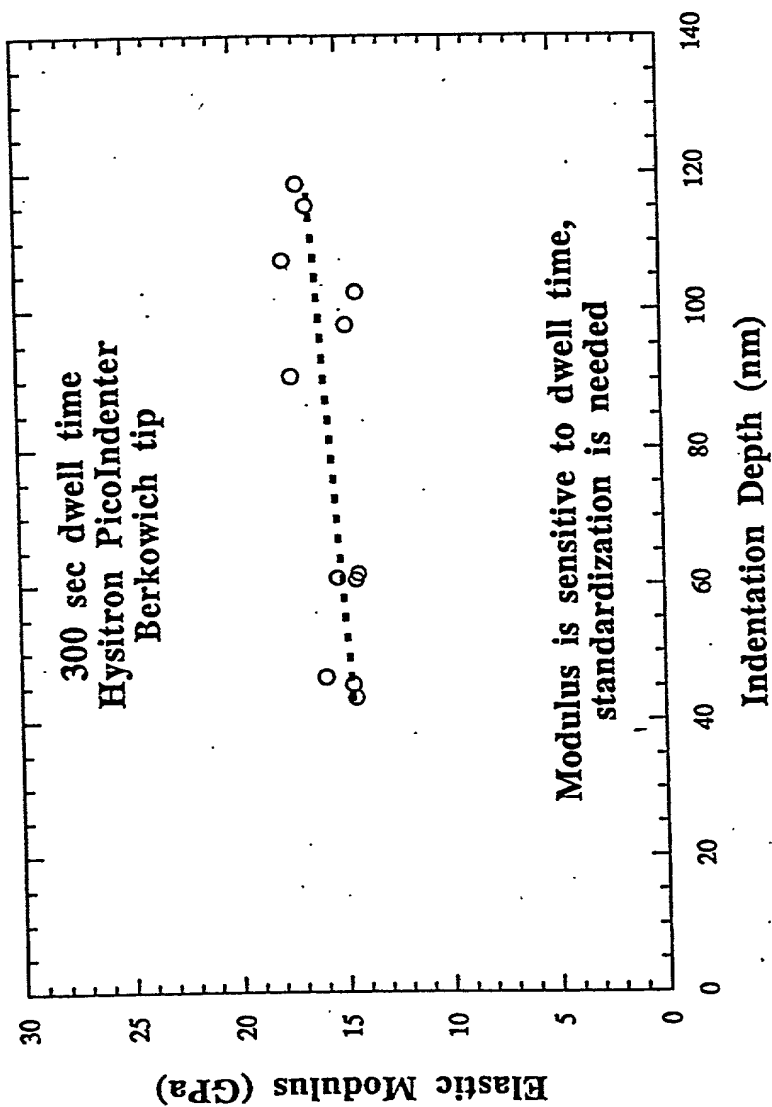


Fig. 7

TOFT40-5932E360

[e90628f.dif] 144:3 ID

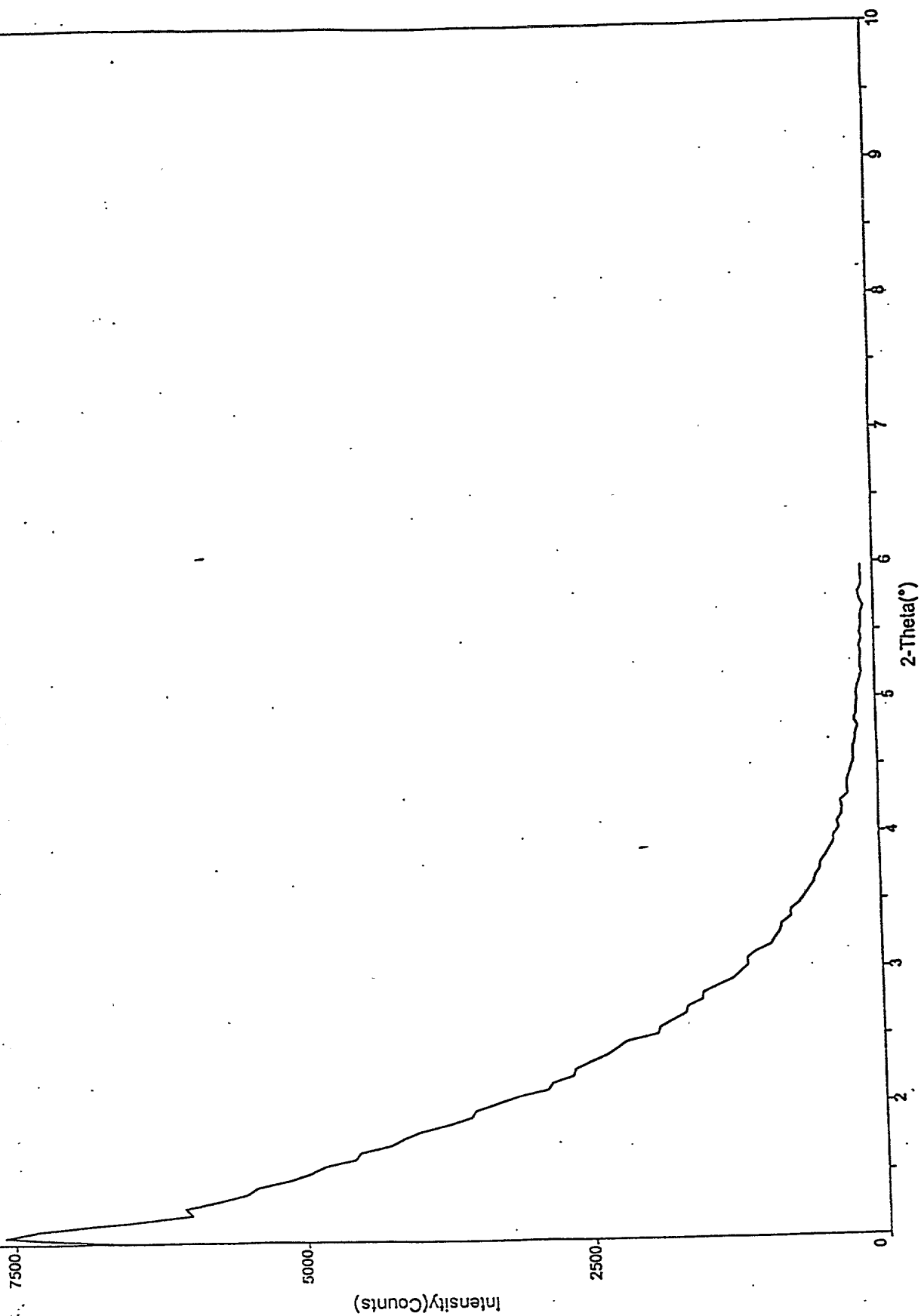


FIG. 8a

PDF GENERATED

[e90628a.dif] 144-3 ID

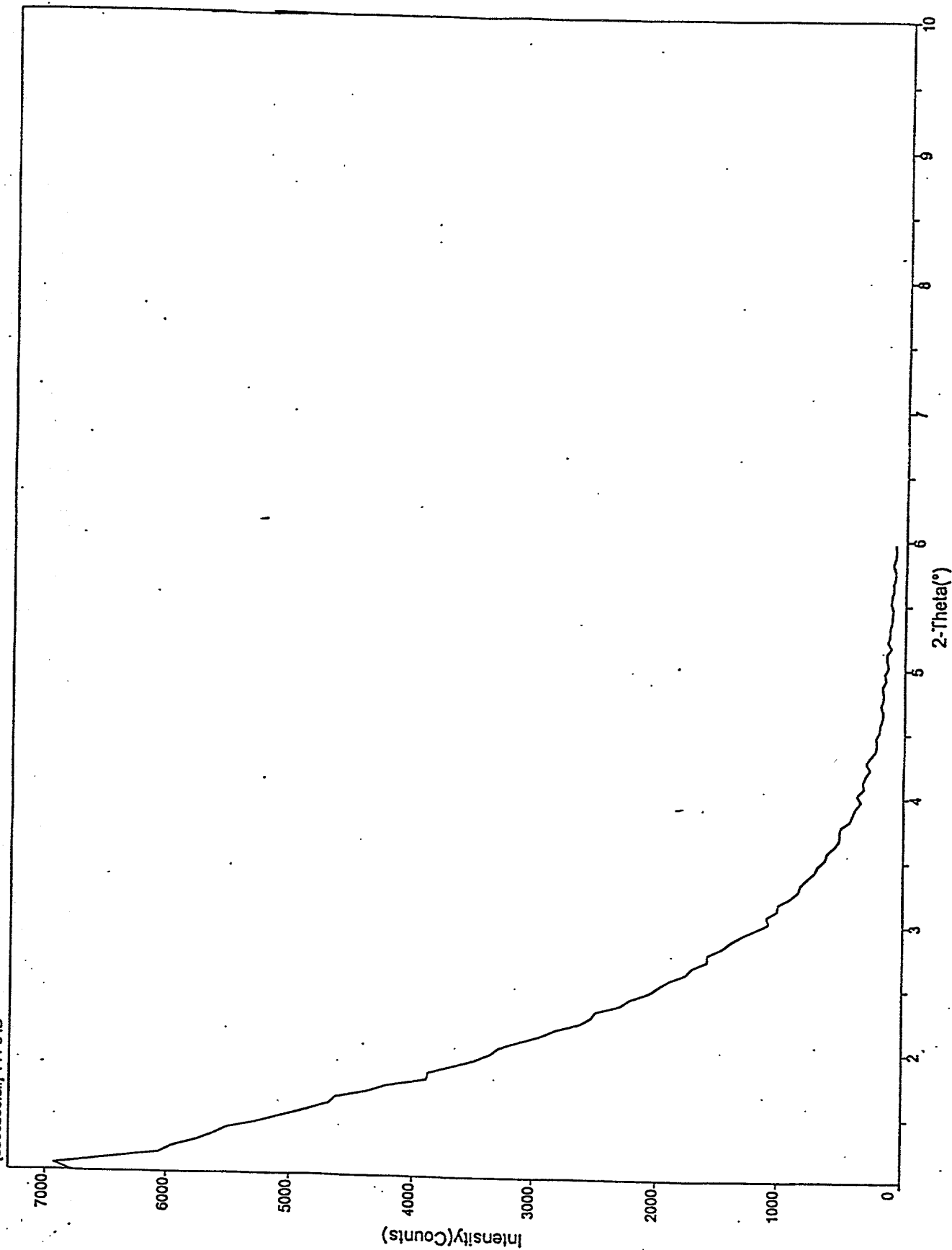


FIG. 8b

T03T40-5884E860

[e90628b.dif] CC22C

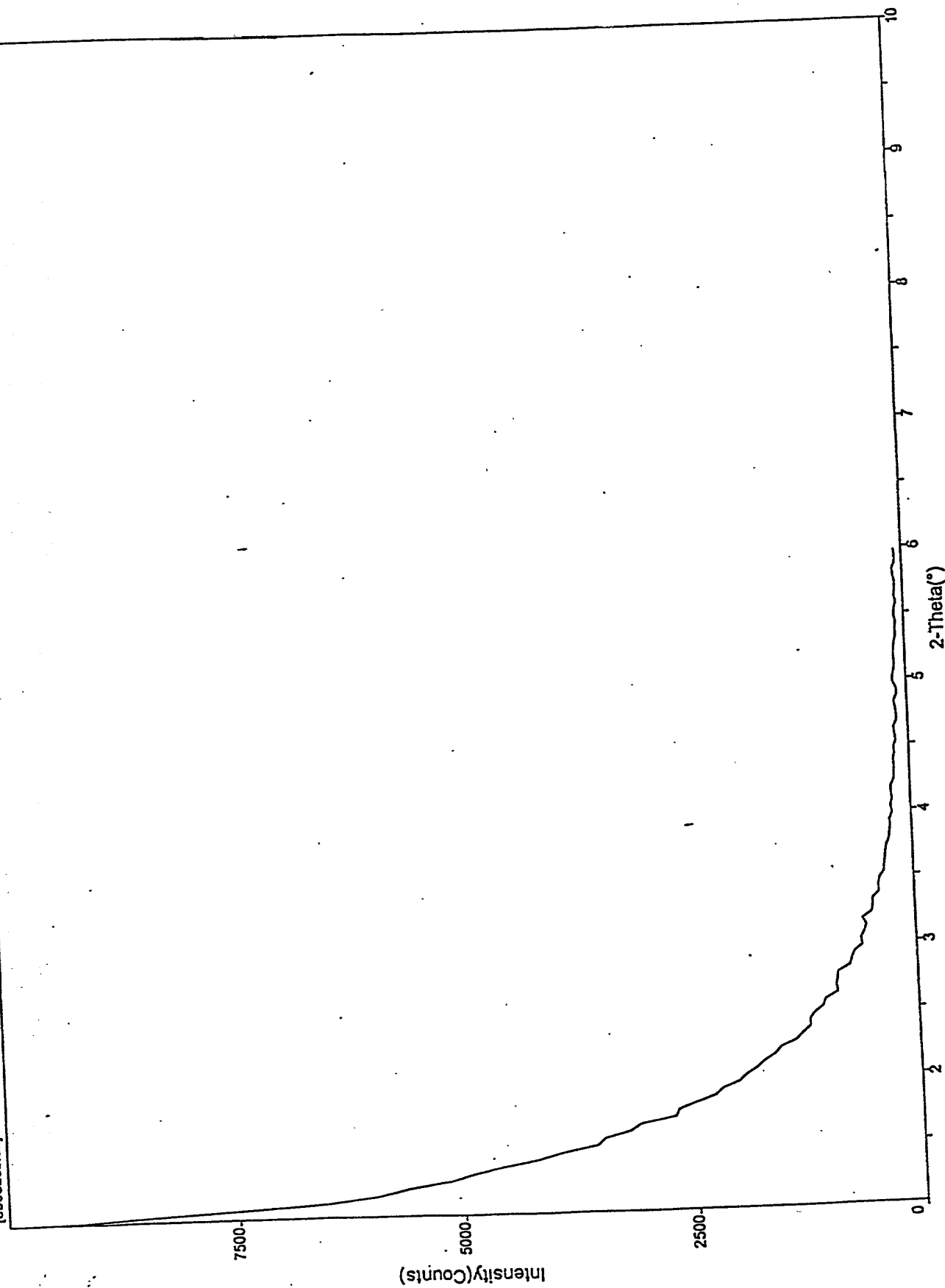


FIG. 9a

PORTO 5334500

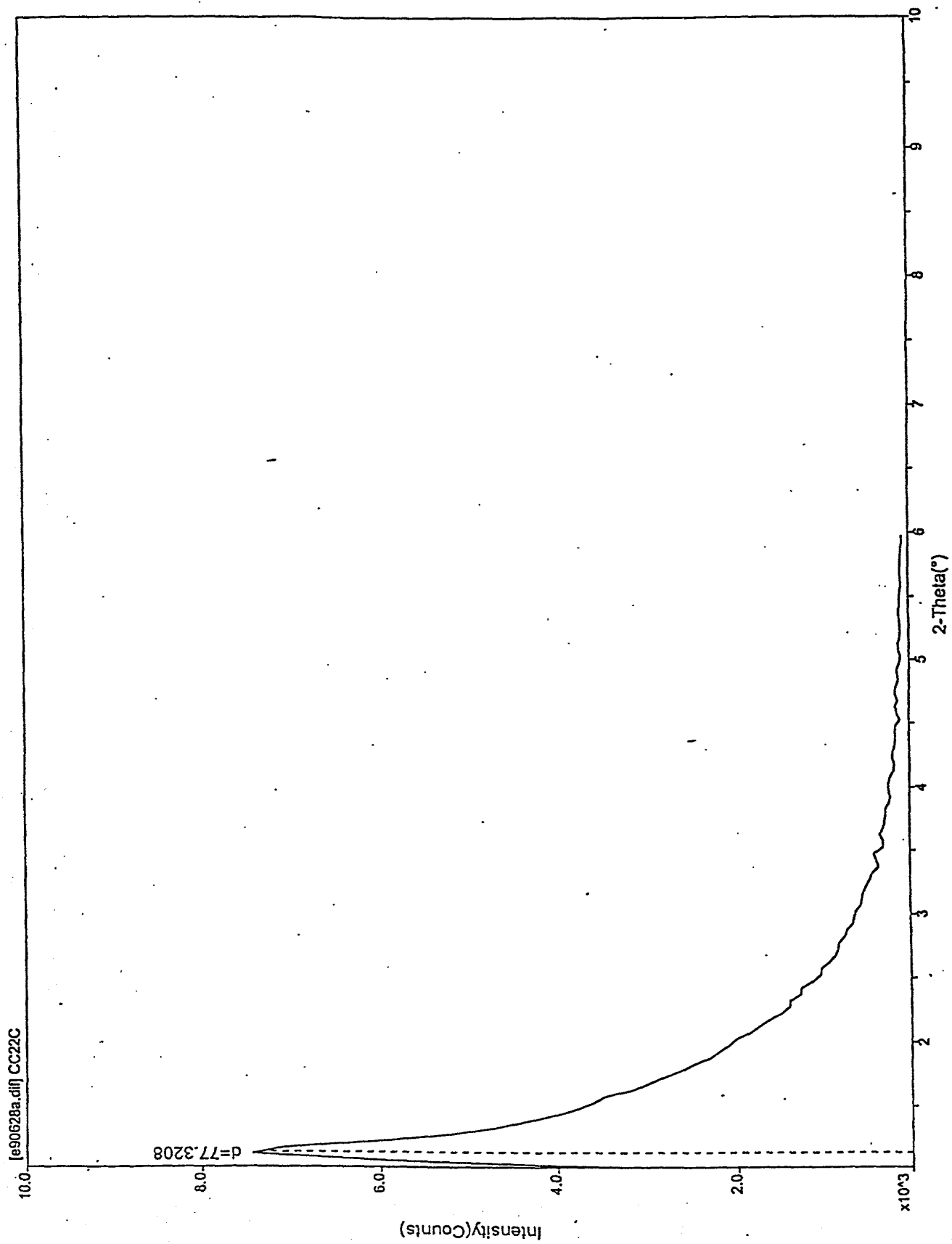


FIG. 9b

T03T10:5334E860

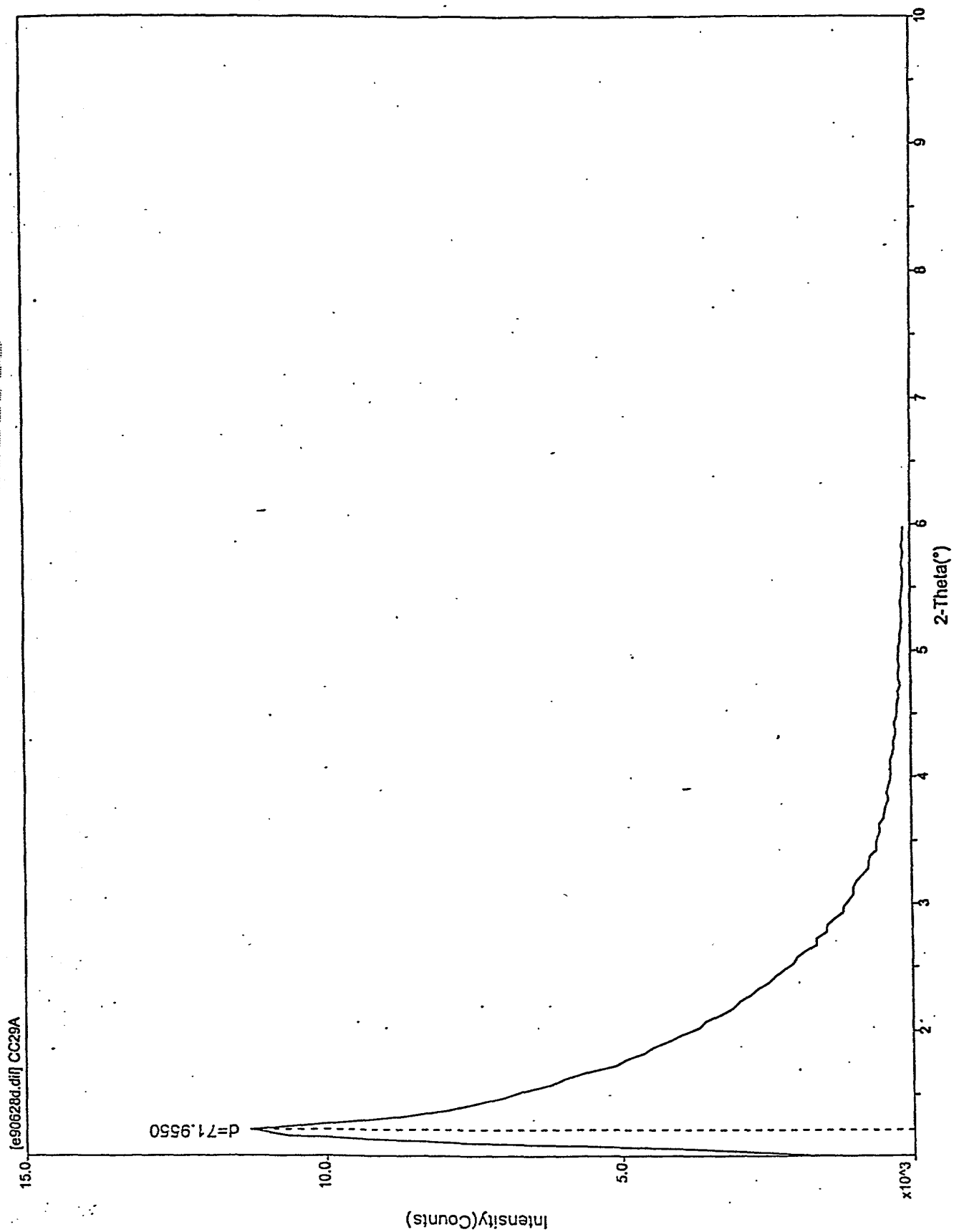


FIG. 10a

T03740-533/2360

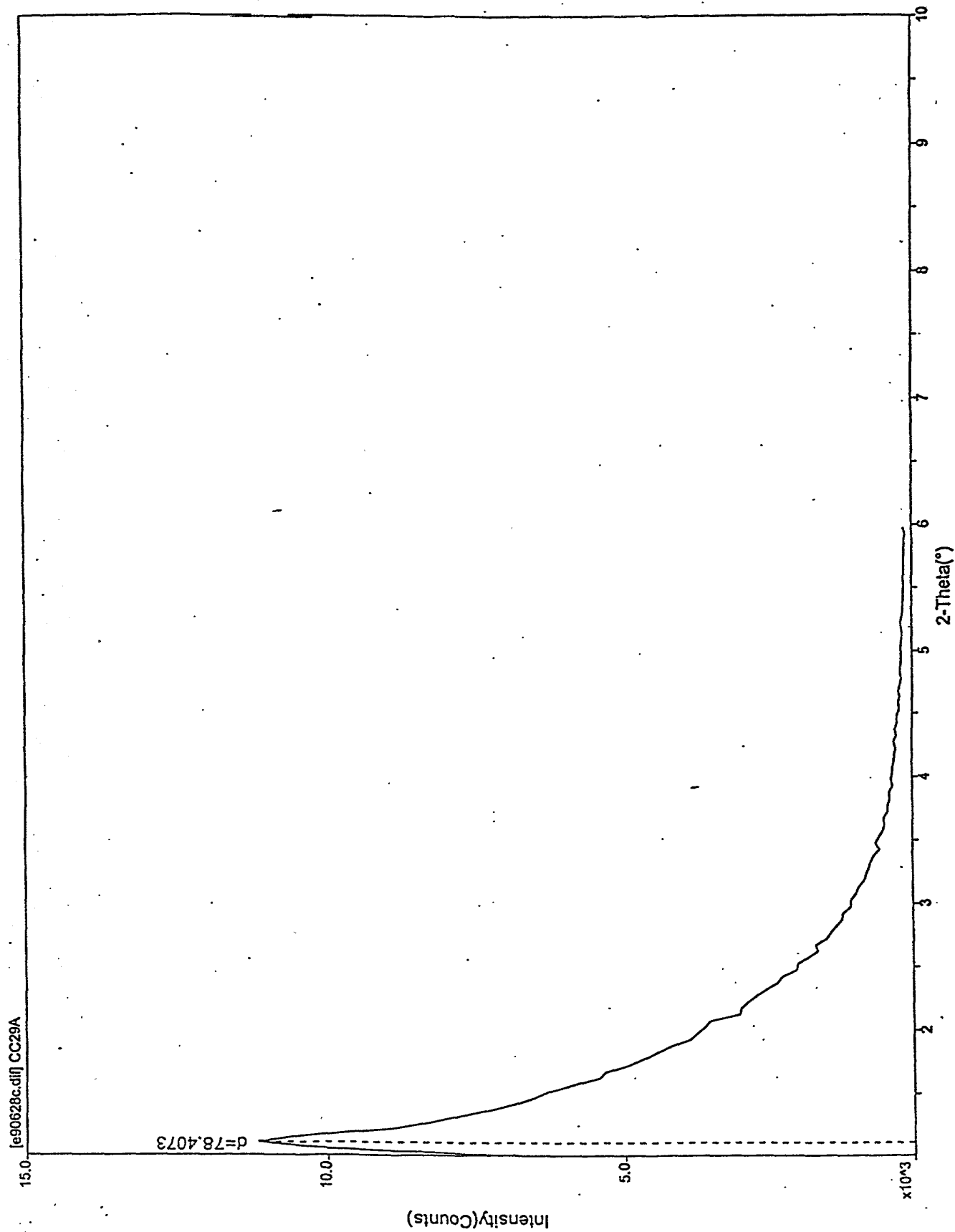


FIG. 10b

T0310-000000

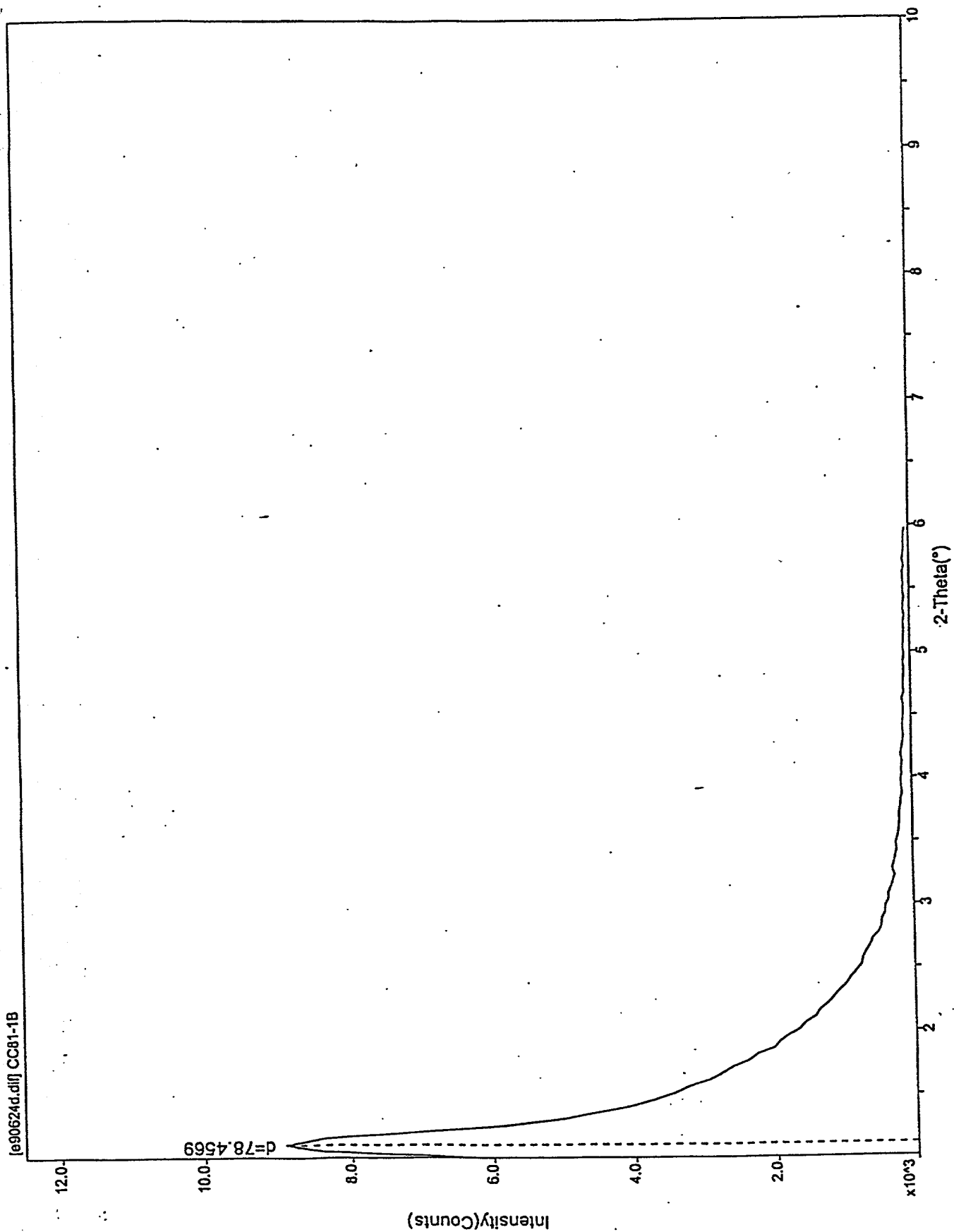


FIG. 11a

T03T40-5332E00

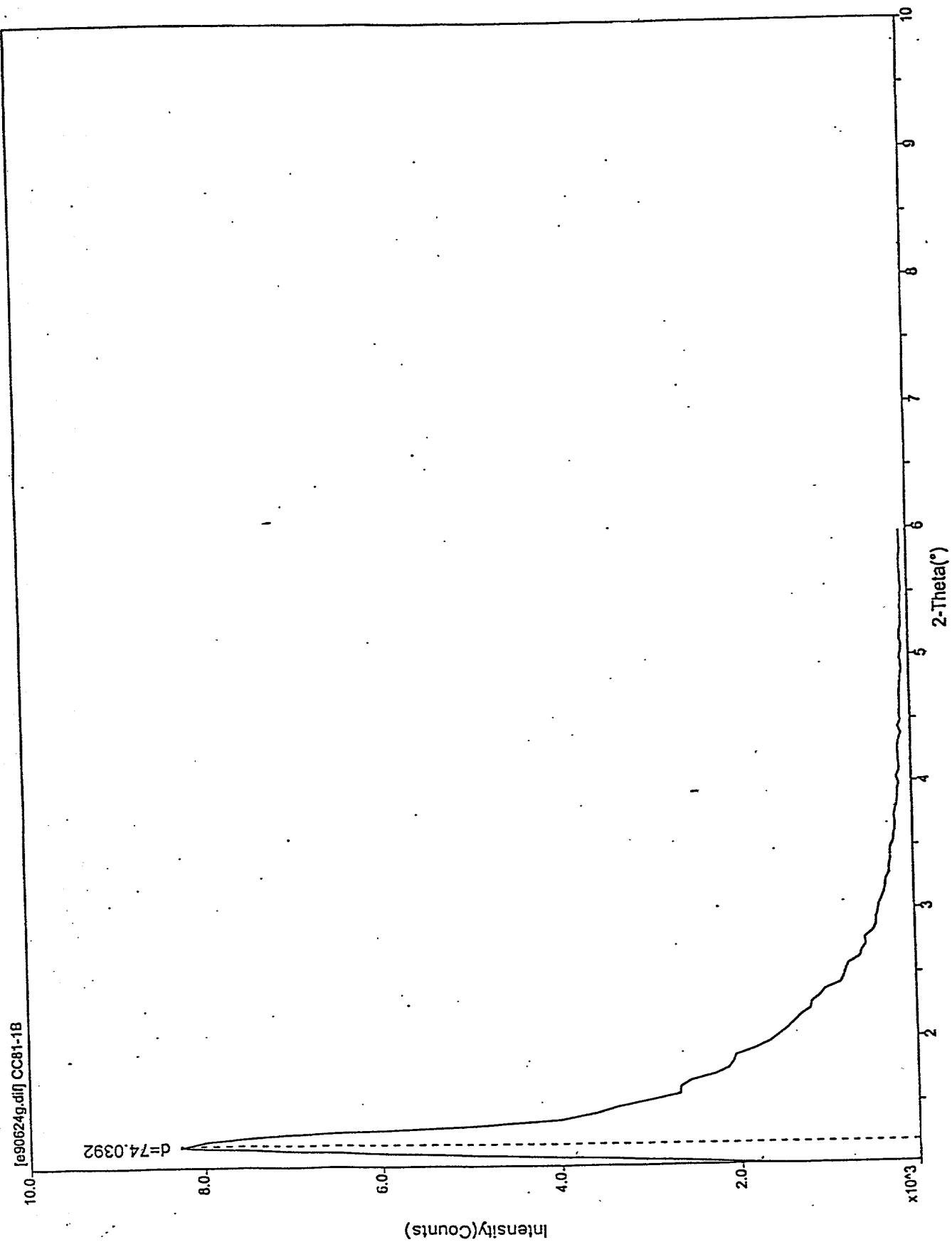


FIG. 11b

T03110-5324360

[e906241.dif] CC03-1B

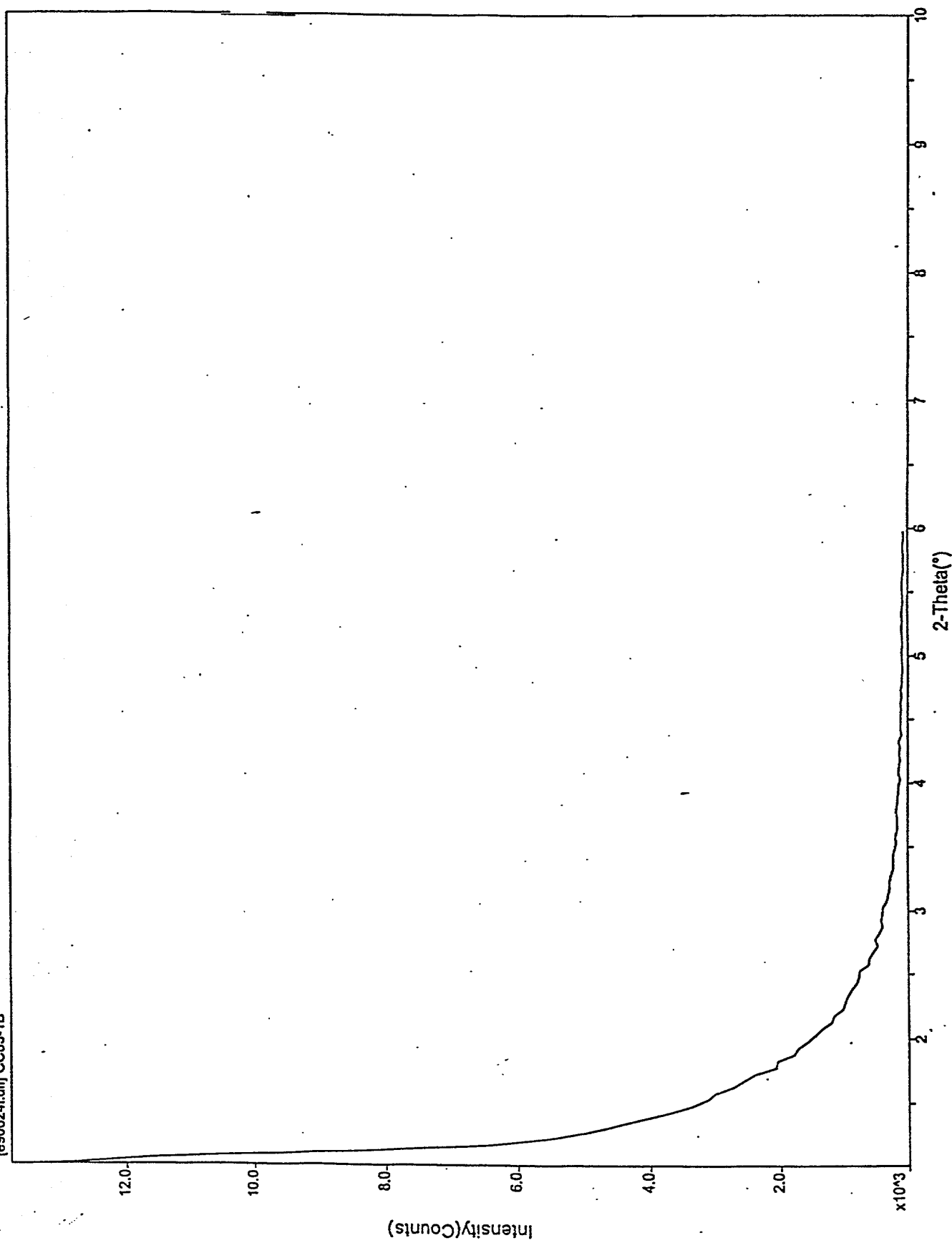


FIG. 12a

TOFHO" 5334E960

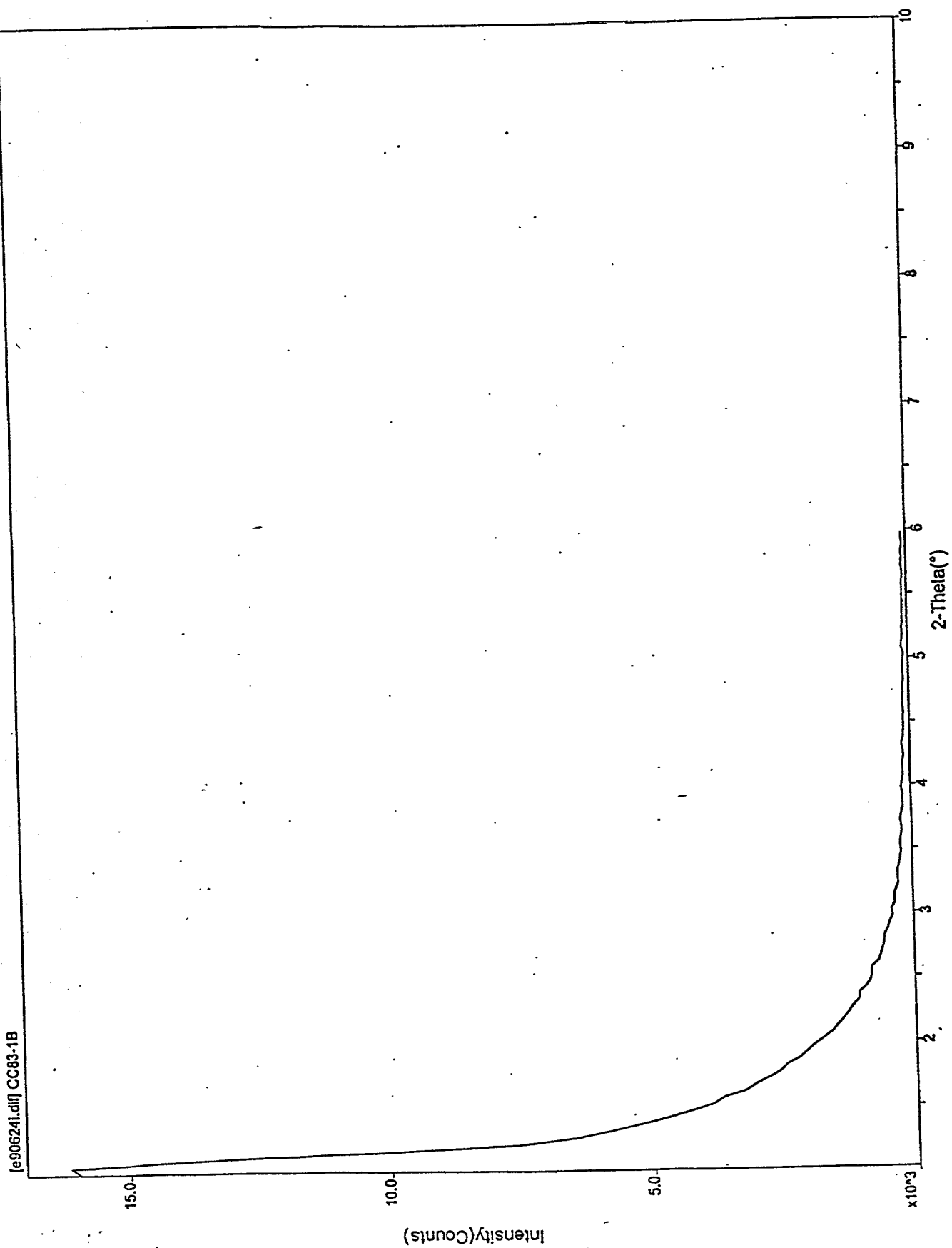


FIG. 17h

T00140:5832E050

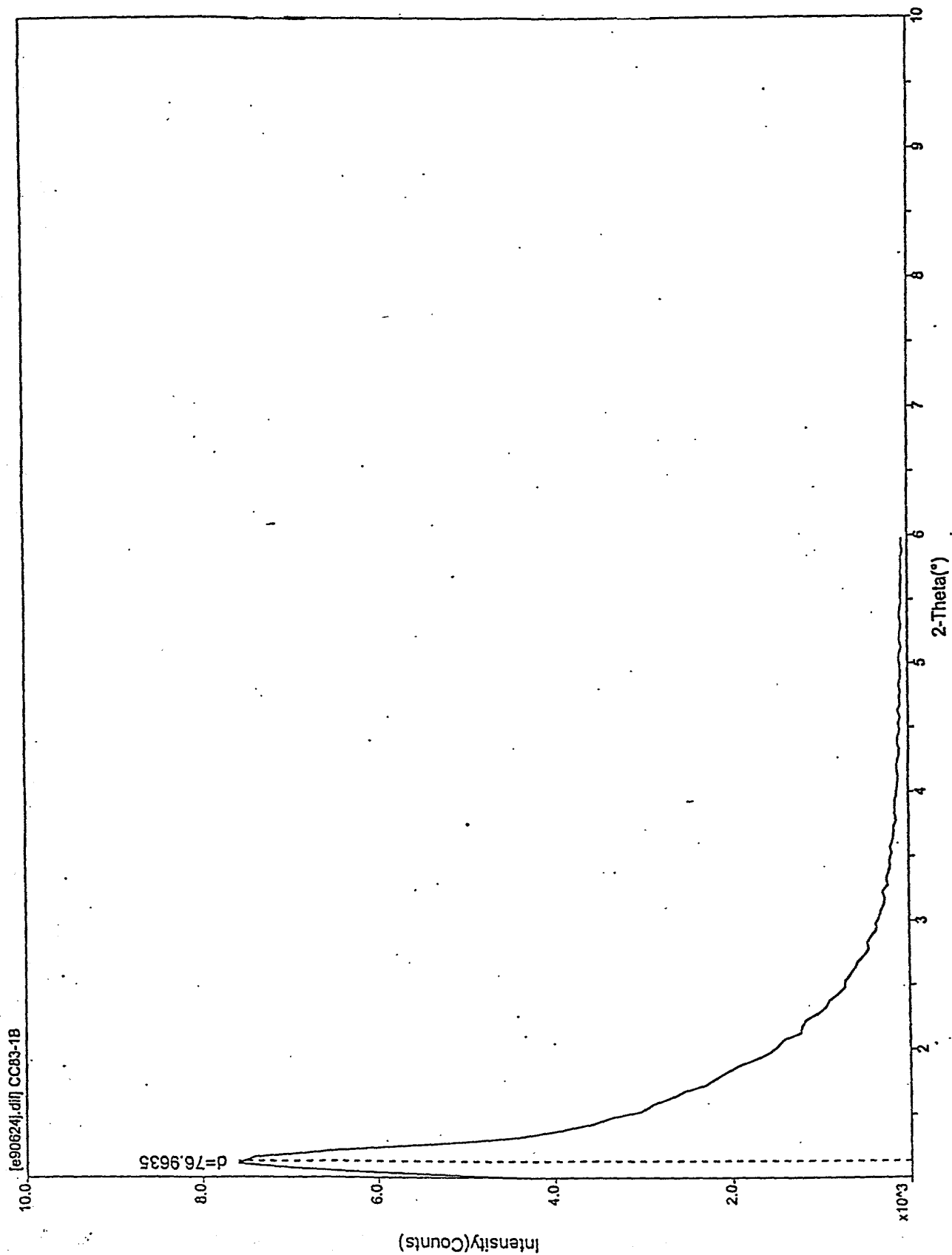
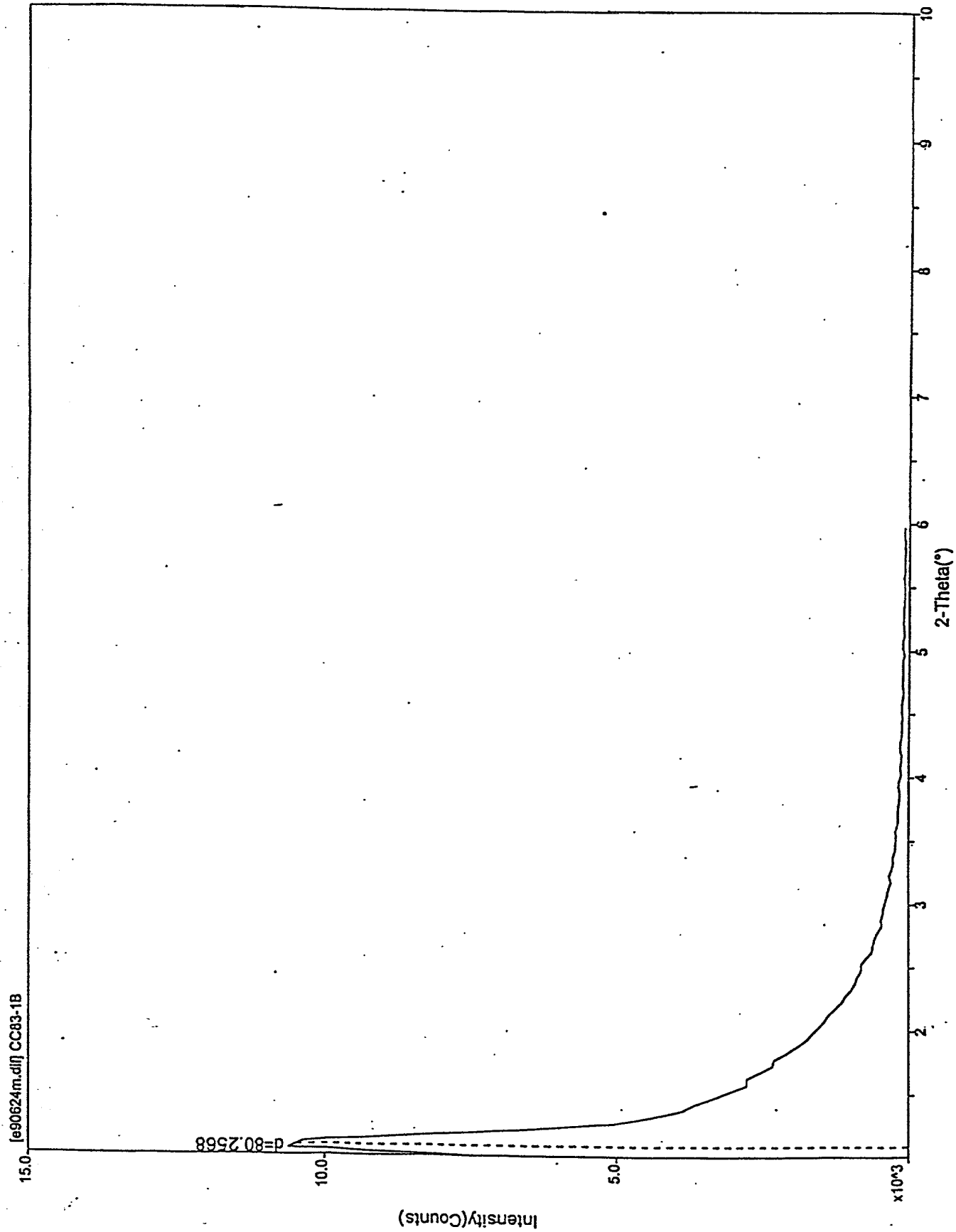


FIG. 12c

TOP-5832E60



FILE 12d